



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,381	10/05/2001	Jenifer Fahey	CS90041	5141
20280	7590	09/19/2005	EXAMINER	
MOTOROLA INC 600 NORTH US HIGHWAY 45 ROOM AS437 LIBERTYVILLE, IL 60048-5343			FLANDERS, ANDREW C	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/972,381	FAHEY ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Andrew C. Flanders	2644	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 1 September 2005 have been fully considered but they are not persuasive.

Regarding the arguments of the rejection of claim 1, Applicant alleges:

“Rigopulos does not enter first and second reference data for first and second soundtracks into an audio mix data reference.”

Examiner respectfully disagrees with this allegation. As shown in the previous rejection, Rigopulos discloses entering a first reference data (i.e. the addition of the background track to the output track) for a first soundtrack (i.e. the possible background soundtrack) of the soundtrack data set file (i.e. the various selectable background tracks) into an audio mix data reference file (i.e. the output) by selecting the first soundtrack (i.e. selecting the background track);

entering a second reference data (i.e. the addition of the instrument to the output track) for a second soundtrack (i.e. the possible instruments) of the soundtrack data set file (i.e. the various selectable instruments) into an audio mix data reference file (i.e. the output) by selecting the second soundtrack (i.e. the selection of the instrument).

Further, the Applicant alleges:

“Rigopulos also fails to disclose storing a reference file having the first and second reference data separately from a soundtrack data set file from which the first and second sound track were selected”

Examiner respectfully disagrees with this allegation. Rigopulos discloses the background tracks (i.e. first sound track data set file) can be stored on the hard drive

(col. 8 line 50), the instrument list (i.e. second sound track data set file) can be stored on the hard drive (col. 9 line 2) and, as shown before, the whole set of data/variables associated with that selection (i.e. audio data reference file) for that item are loaded into memory (col. 9 line 25 – 32). So, in Rigopulos, contrary to Applicant's allegation, the device stores the whole set of data/variables in memory and the first and second soundtrack data set file on the hard drive; thus being stored separately.

As such, the arguments are not persuasive and the rejection of claim 1 stands.

Regarding the arguments of the rejection of claim 2, Applicant alleges:

“Rigopulos does not create an ‘audio mix data reference file’ into which time data is entered”

Examiner respectfully disagrees with this allegation. As shown above regarding the arguments of claim 1, Rigopulos discloses creating an audio mix data reference file (i.e. the output). As shown in the previous rejection, Rigopulos discloses a plurality of rhythm blocks which define a **time** when a note should be played and playing fewer notes over **time** (emphasis added). Defining the time a note should be played and altering the notes over time adjusts the output and thus “creates an ‘audio mix data reference file’ into which time data is entered.” As such, the arguments regarding the rejection of claim 2 are not persuasive and the rejection stands.

Regarding the arguments of the rejection of claim 3, Applicant alleges:

“While the background tracks of Rigopulos contain a tempo track, there is no disclosure in Rigopulos of entering tempo data in an audio mix data reference file.”

Examiner respectfully disagrees with this allegation. As noted by applicant, the background tracks of Rigopulos contain a tempo track. Thus changing the background track would inherently change the tempo track in the output (i.e. audio mix data reference file). This Rigopulos does disclose "entering tempo data in an audio mix data reference file." As such, the arguments regarding the rejection of claim 3 are not persuasive and the rejection stands.

Regarding the arguments of the rejection of claim 4, Applicant alleges:

"Rigopulos does not enter soundtrack data into a reference file."

Examiner respectfully disagrees with this allegation. As shown above and in the previous rejection, Rigopulos discloses entering a first reference data (i.e. the addition of the background track to the output track) for a first soundtrack (i.e. the possible background soundtrack) of the soundtrack data set file (i.e. the various selectable background tracks) into an audio mix data reference file (i.e. the output). As such, the arguments regarding the rejection of claim 4 are not persuasive and the rejection stands.

Regarding the arguments of the rejection of claim 5, Applicant alleges:

"Rigopulos does not disclose playing first and second soundtracks upon selecting a second soundtrack while playing a first soundtrack."

Examiner respectfully disagrees with this allegation. As shown in the previous rejection Rigopulos discloses playing a first soundtrack (i.e. starting the accompaniment track) and a second soundtrack (i.e. the user may begin plying the melody) upon

selecting a second soundtrack while playing a first soundtrack (i.e. the user is only allowed to create a melody (*play the second soundtrack*) after the accompaniment has been started). As such, the arguments regarding the rejection of claim 5 are not persuasive and the rejection stands.

Regarding the arguments of the rejection of claim 6, Applicant alleges:

“Rigopulos does not disclose playing first and second soundtracks upon selecting a soundtrack while playing a first soundtrack.”

Examiner respectfully disagrees. This argument is not persuasive for the same reasons stated above regarding the rejection of claim 5.

Regarding the arguments of the rejection of claim 7, Applicant alleges:

“Rigopulos does not disclose generating an ‘audio mix data reference file’”

Examiner respectfully disagrees. This argument is not persuasive for the same reasons stated above regarding claim 1.

Applicant further alleges:

“...and thus there is no reason for Rigopulos to integrate a reference file and a data set file into a common format.”

Examiner respectfully disagrees. As shown in the previous rejection Rigopulos takes the ~~takes the~~ background track and melody (i.e. soundtrack data set) outputs them (i.e. audio mix data reference file) in a MIDI format (i.e. a common audio format).

Regarding the arguments of the rejection of claim 8, Applicant alleges:

“Rigopulos does not disclose an ‘audio mix data reference file’”

Examiner respectfully disagrees. This argument is not persuasive for the same reasons stated above regarding claim 1.

Applicant further alleges:

“...and thus there is no reason for Rigopulos to irreversibly integrate a reference file and a data set file into a common format.”

Examiner respectfully disagrees. The reason is to save the output in a MIDI format as shown in the previous rejection.

Regarding the arguments of the rejection of claim 9, Applicant alleges:

“Rigopulos does not disclose an ‘audio mix data reference file’ and thus Rigopulos cannot play an audio mix using an audio mix reference file”

Examiner respectfully disagrees. This argument is not persuasive for the same reasons stated above regarding claim 1.

Regarding the arguments of the rejection of claim 10, Applicant alleges:

“Rigopulos does not disclose playing soundtracks referenced in a reference file.”

Examiner respectfully disagrees with this allegation. This argument is not persuasive for the same reasons stated above regarding claim 1.

Applicant further alleges:

“Rigopulos does not disclose an audio mix audio file devoid of soundtrack data.”

Examiner respectfully disagrees. As shown in the previous rejection, the mix (output) is created from the previously selected background track and user melody. The mix does not include data from the soundtrack data set file. The background is simply selected from the soundtrack data set file and then output, sans the data. The output is simply played, no data is output as alleged. As such the argument is not persuasive and the rejection stands.

Regarding the arguments of the rejection of claim 11, Applicant alleges:

“Rigopulos discloses playing the melody upon depressing a button on the joystick, not based on times specified by a reference file”

Examiner respectfully disagrees with this allegation. The reference file, as shown in the previous rejection, in this instance is the melody. Depressing the play button at a certain time to output the background and melody (i.e. audio mix data reference file) would play the first and second sound tracks at time specified by the audio mix data reference file. For instance, perhaps a user would like to perform a solo over a given portion of the background music. The user would apply this solo at the given time and thus would be playing at a time specified by the audio mix data reference file. As such the argument is not persuasive and the rejection stands.

Regarding the arguments of the rejection of claim 12, Applicant alleges:

“the background track of Rigopulos is not a polyphonic audio mix since it contains only a single track”



Examiner respectfully disagrees. Applicant is misusing the terminology of polyphonic. Polyphonic is Music with two or more independent melodic parts sounded together. The background track includes two or more parts (i.e. can be MIDI) and thus is polyphonic, contrary to Applicant's allegation. As such the argument is not persuasive and the rejection stands.

Regarding the arguments of the rejection of claim 13, Applicant alleges:

"Rigopulos does not disclose an 'audio mix data reference file and thus there is no reason for Rigopulos to irreversibly integrate such a reference file and a data set file into a common format."

Examiner respectfully disagrees with this allegation. This argument is not persuasive for the same reasons stated above regarding claim 7.

Regarding the arguments of the rejection of claim 14, Applicant alleges:

"Rigopulos does not disclose an 'audio mix data reference file and thus there is no reason for Rigopulos to irreversibly integrate such a reference file and a data set file into a common format."

Examiner respectfully disagrees with this allegation. This argument is not persuasive for the same reasons stated above regarding claim 7.

Applicant further alleges"

"Rigopulos does not disclose...uploading the common audio format file"

Examiner respectfully submits that this is true. However, as stated in the previous rejection, Hruska does; see paragraph 92. AS such the argument is not persuasive and the rejection stands.

Regarding the arguments of the rejection of claim 15, Applicant alleges:

“Rigopulos does not disclose an ‘audio mix data reference file and thus there is no reason for Rigopulos to irreversibly integrate such a reference file and a data set file into a common format.”

Examiner respectfully disagrees with this allegation. This argument is not persuasive for the same reasons stated above regarding claim 7.

Regarding the arguments of the rejection of claim 16, Applicant alleges:

“Rigopulos does not disclose a reference file or integrating the reference file with a soundtrack data set file”

Examiner respectfully disagrees with this allegation. This argument is not persuasive for the same reasons stated above regarding claim 7.

Applicant further alleges:

“there is no reason to create audio mix data by entering reference data into a reference file”

Examiner respectfully disagrees. As shown above and in the previous rejection, Rigopulos does disclose creating audio mix data (i.e. output) by entering reference data (i.e. selecting background and melody) into a reference file (i.e. the output). As such the argument is not persuasive and the rejection stands.

Regarding the arguments of the rejection of claim 17, Applicant alleges:

“Rigopulos does not create an ‘audio mix data reference file’ into which time data is entered”

Examiner respectfully disagrees with this allegation. This argument is not persuasive for the same reasons stated above regarding claim 2.

Regarding the arguments of the rejection of claim 18, Applicant alleges:

The first and second soundtracks are not played upon selection.

Examiner respectfully disagrees with this allegation. The selection and pressing of the play button is intended to read upon the step of selecting. As such, when the user "selects" the track, it is played. Furthermore, assuming for the sake of argument, that this grouping does not read upon the selection step claimed, the mere fact that Rigopulos does not start playing until a button is pressed does not patentably distinguish Applicant's claim from the prior art. It is irrelevant whether the playback starts at that instant, or when a user presses the button as the same task is being accomplished. The instantaneous starting does not provide a new or unexpected result. As such the argument is not persuasive and the rejection stands.

Regarding the arguments of the rejection of claim 19, Applicant alleges:

"Rigopulos does not disclose or suggest generating or storing  
'audio mix reference file'"

Examiner respectfully disagrees with this allegation. As shown in the previous rejection, the selections are loaded into memory and stored in MIDI format. As such the argument is not persuasive and the rejection stands.

Regarding the arguments of the rejection of claim 20, Applicant alleges:

“Rigopulos does not disclose or suggest an ‘audio mix reference file’ and thus Rigopulos does not suggest playing a polyphonic audio mix by playing soundtrack referenced on an audio mix data reference file.”

Examiner respectfully disagrees with this allegation. This argument is not persuasive for the same reasons stated above regarding claim 7.

Regarding the arguments of the rejection of claim 23, Applicant alleges:

“Rigopulos does not mix upon selecting.”

Examiner respectfully disagrees with this allegation. This argument is not persuasive for the same reasons stated above regarding claim 18.

Regarding the arguments of the rejection of claim 34, Applicant alleges:

“Thus the first and second soundtracks of Rigopulos do not have associated different time intervals”

Examiner respectfully disagrees with this allegation. A background track inherently has a given length (i.e. time interval). Playing a two minute background track and playing a melody track for 30 seconds would read upon this limitation contrary to Applicant’s allegation. As such the argument is not persuasive and the rejection stands.

Regarding the arguments of the rejection of claim 35, Applicant alleges:

“Rigopulos does not disclose saving an audio mix reference file that is stored separately from soundtracks referenced in the reference file.”

Examiner respectfully disagrees with this allegation. This argument is not persuasive for the same reasons stated above regarding claim 1.

Regarding the arguments of the rejection of claim 30, Applicant alleges:

"In Rigopulos, however, music is not created using the instrument until the user depresses the PLAY button on the joy stick.

Examiner respectfully disagrees with this allegation. This argument is not persuasive for the same reasons stated above regarding claim 18.

Applicant further alleges:

"The Examiner's assertion that it would have been obvious to add features of Furukawa to Rigopulos '... to create a more unique playback track' is not supported by the art"

Examiner respectfully disagrees with this allegation. It is notoriously well known in the art to apply effects such as reverberation, distortion, pitch shifting, echo, delay, and other various effects to a musical instrument. A piano for instance has a pedal which sustains a note. A guitar has strings which can be bent to shift the pitch. Both of these can be implemented and have been implemented within electronic devices.

Applicant further alleges:

"There is no disclosure in Rigopulos to create polyphonic playback tracks"

Examiner respectfully disagrees. As shown in the previous rejection, the device deals with MIDI files (i.e. polyphonic tracks) As such, the argument is not persuasive and the rejection stands.

Regarding the arguments of the rejection of claim 31, Applicant alleges:

"In Rigopulos, however, music is not created using the instrument until the user depresses the PLAY button on the joystick."

Examiner respectfully disagrees with this allegation. This argument is not persuasive for the same reasons stated above regarding claim 18.

Regarding the arguments of the rejection of claim 37, Applicant alleges:

“In Rigopulos, however, music is not created using the instrument until the user depresses the PLAY button on the joystick.”

Examiner respectfully disagrees with this allegation. This argument is not persuasive for the same reasons stated above regarding claim 18.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1 – 29 and 34 – 36** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rigopulos (U.S. Patent 5,763,804) in view of Hruska (U.S. Patent Application Publication 2001/017415).

**Claims 1 – 29 and 34 – 36** remain rejected for the same reasons set forth in the action dated 10 June 2005

**Claims 30 – 33 and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rigopulos (U.S. Patent 5,763,804) in view of Hruska (U.S. Patent Application Publication 2001/017415) and in further view of Furukawa (U.S. Patent 5,804,755).

**Claims 30 – 33 and 37** remain rejected for the same reasons set forth in the action dated 10 June 2005.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Flanders whose telephone number is (571) 272-7516. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

acf



VIVIAN CHIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2644